

Owner's Operating Service Instruction Manual

10¢

Model Nos.
124-290A
124-295A

- **ASSEMBLY**
- **OPERATION**
- **REPAIR PARTS**

21" SELF-PROPELLED ROTARY MOWERS

WARRANTY

For one year from date of purchase, MTD Products Inc will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units, refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. **UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.**

I M P O R T A N T

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

1. Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power mower.
3. Keep the area of operation clear of all persons, particularly small children and pets.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
4. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine (motor).
5. Never attempt to make a wheel adjustment while the engine (motor) is running.
6. Mow only in daylight or in good artificial light.
7. Never operate the equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.

OPERATION

1. Do not change the engine governor settings or overspeed the engine.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Stop the blade(s) when crossing gravel drive, walks or roads.
4. After striking a foreign object, stop the engine (motor), remove the wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

5. If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.

6. Stop the engine (motor) whenever you leave the equipment, before cleaning the mower housing, and when making any repairs or inspections.

7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.

8. Do not run the engine indoors.

9. Shut the engine (motor) off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.

10. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.

11. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.

12. Never operate mower without proper guards, plates or other safety protective devices in place.

13. Keep washout ports and other mower-housing service openings closed when mowing.

MAINTENANCE AND STORAGE

1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.

2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.

5. Check the grass catcher bag frequently for wear or deterioration. Replace with new bag for safety protection.

ASSEMBLY INSTRUCTIONS

HANDLE ASSEMBLY MODEL 124-290A

1. Remove the loose hardware from the assembly pack. You will need a screwdriver and a 5/16" wrench, either a socket as shown in figure 1 or an open end wrench.
2. Assemble the lower handle to the handle brackets as shown in figure 2.
3. Secure the handle with cotter hairpins on both sides. See figure 2.
4. Place the handle panel over the lower handle and fasten with the handle panel screw using a 5/16" wrench. See figure 3.
5. Place the upper handle over the lower handle and line up the holes as shown in figure 4.
6. Insert the curved head bolt from the inside and tighten the knob by hand. See figure 4.
7. Place the throttle control in the handle panel and assemble it with the two throttle screws using a screwdriver. See figure 5.
8. Use the cable clip to fasten the throttle control wire to the lower handle.
9. Check ALL nuts and bolts for correct tightness.

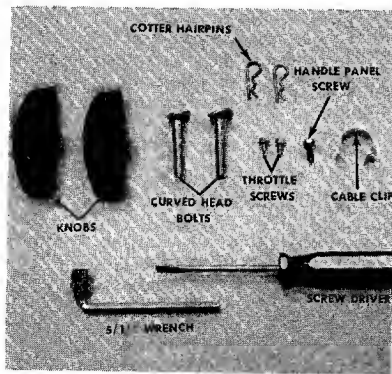


FIGURE 1. LOOSE HARDWARE AND TOOLS

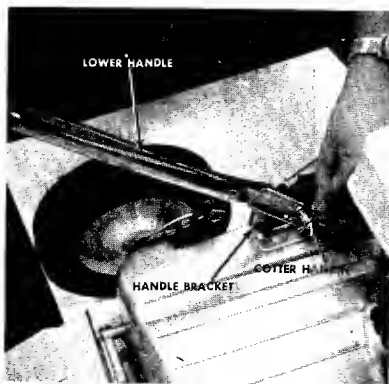


FIGURE 2. LOWER HANDLE ASSEMBLY



FIGURE 3. HANDLE PANEL ASSEMBLY

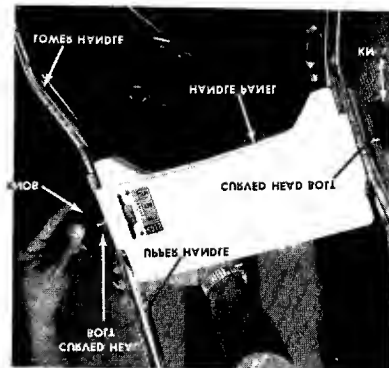


FIGURE 4. UPPER HANDLE ASSEMBLY

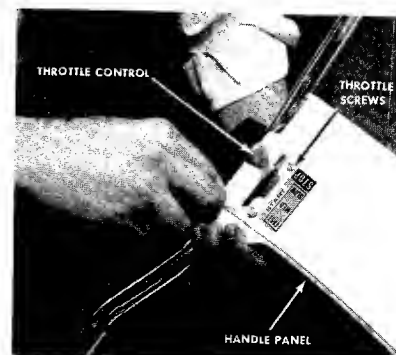


FIGURE 5. THROTTLE CONTROL ASSEMBLY

HANDLE ASSEMBLY MODEL 124-295A

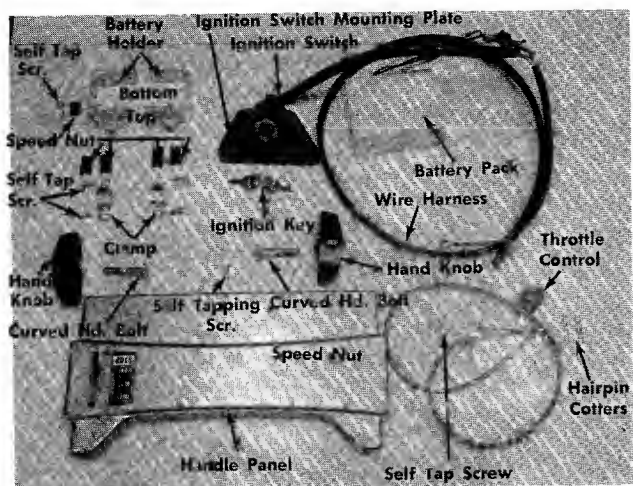


FIGURE 1. PARTS PROVIDED

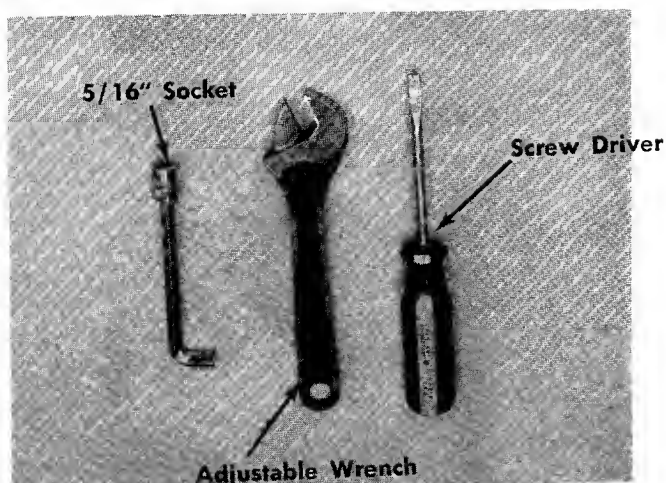


FIGURE 2. TOOLS REQUIRED

1. Place the throttle control in handle panel and secure with two hex slotted head screws. See figure 3.

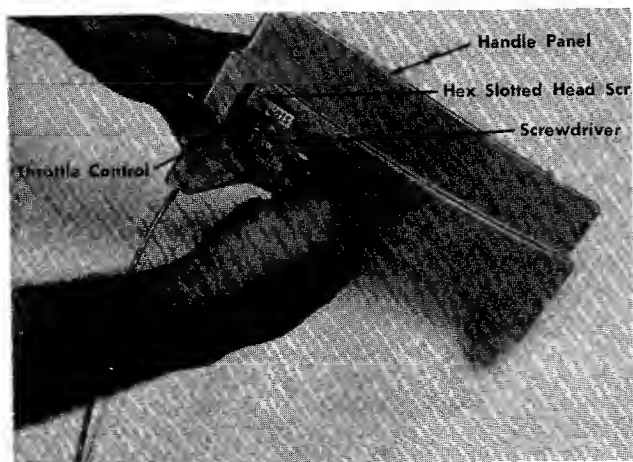


FIGURE 3. THROTTLE ASSEMBLY

2. Place a speed nut on bottom of one of the battery holders. See figure 1.
3. Place both battery holders around battery pack. See figure 4.
4. Secure battery holders to battery pack with a hex slotted self tapping screw. See figure 4.

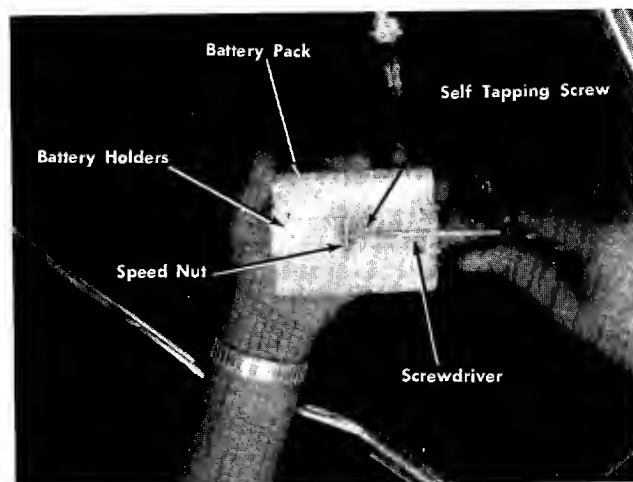


FIGURE 4. ASSEMBLY OF BATTERY HOLDERS

5. Place four more speed nuts on the top of battery holders. See figure 1.
6. Place the battery pack with battery holders in the center of the lower handle. See figure 5.
7. Secure battery pack in position with two clamps and two self tapping screws. See figure 5. NOTE: Just start two screws on bottom of clamps. Do not tighten.

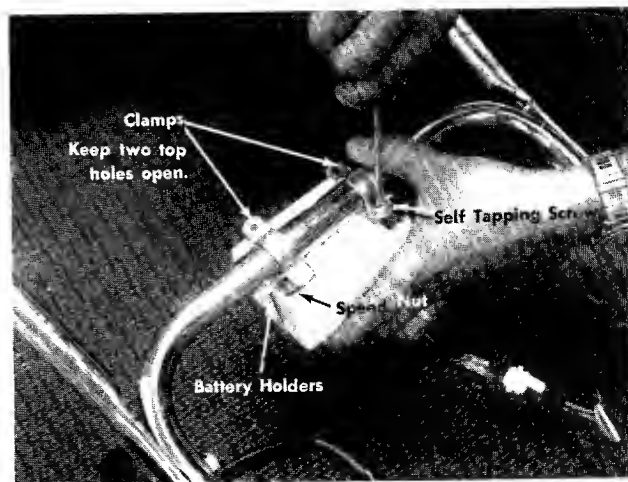


FIGURE 5. ASSEMBLY OF BATTERY PACK TO HANDLE

8. Place the ignition plate in position. See figure 6.



FIGURE 6. ASSEMBLY OF IGNITION PLATE

9. Assemble the ignition plate between the battery holders and clamps with two self tapping screws. See figure 6.
10. Now all four screws holding battery pack and ignition plate can be tightened securely.
11. Place the upper handle in position and start the hand knobs onto the curved head bolts. Do not tighten.
12. Place the handle panel in position over the head of the curved head bolts and secure the hand knobs tightly.
13. Remove the ignition keys from the ignition switch. See figure 7.

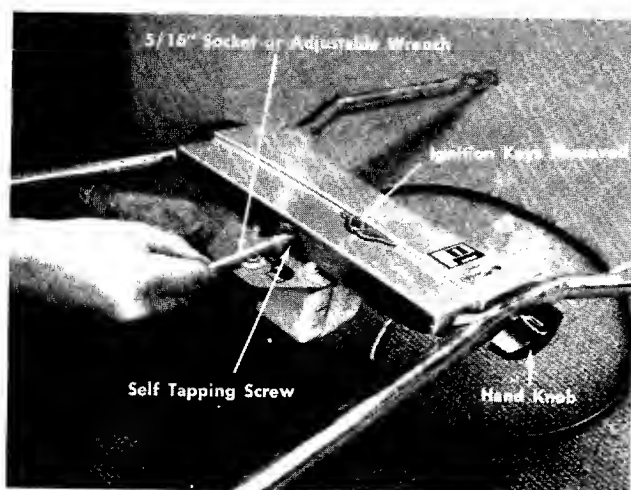


FIGURE 7. HANDLE PANEL ASSEMBLY

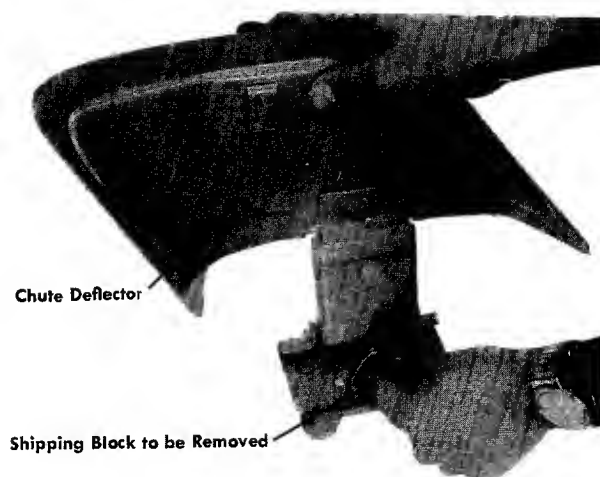
14. Secure top center of handle panel with hex head screw. See figure 7.
15. Place handle assembly on mower and secure with two hairpin cotters provided. See figure 1.
16. Secure throttle control wire to handle with cable clips.
17. Plug wire harness into engine.
18. Check ALL nuts and bolts for correct tightness.

NOTE

It may be necessary to spread the ends of the lower handle outward slightly to assure a snug fit against the bracket mounting area.

CAUTION

Please note that the chute deflector on your mower is in an upright position. It is held in that position by a shipping block. This block is used for shipping purposes only. It must be removed and discarded before your mower is put into operation.



Parts List for Model 124-295A Electrical System

Ref. No.	Part No.	DESCRIPTION () Number Req'd.
1	725-267	Ignition Switch
2	725-201	Ignition Key
3	725-304	G.E. Charger (#49B111LD03)
4	725-305	Wire Harness
5	710-429	Hex-B-Tapping Scw #10 Thd. x .38" Lg. (5)
6	725-303	Battery G.E. Model (41B906LD02-G2)
7	712-344	Speed Nut #10Z (5)
8	11638	Battery Holder Assembly
9	11618	Clamp (2)
10	11813	Switch Bracket

NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model mower. The engine is NOT under warranty by the mower manufacturer.

Find us fast in the



If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

OPERATION

1. Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for the care and maintenance of engine. **READ DIRECTIONS CAREFULLY.**
2. To disconnect the power to the rear drive wheels so the mower can be pushed by hand, depress the handle.
To engage the drive wheels, lift the handle.
3. When turning the mower depress the handle and raise the front wheels, and pivot on the rear wheels. The differential action of the rear axle allows the wheels to turn independently on turns and allows both wheels to drive when the handle is in the UP position.

START ENGINE

With the throttle lever conveniently mounted on the handle, start, fast, slow and stopping of the engine is conveniently controlled with one lever. After the engine has been properly fueled and oiled (refer to engine operating and maintenance instructions), start engine in the following manner.

BATTERY CARE

1. To completely charge a discharged battery it takes 14-16 hours.
2. Recharge on ordinary 110-120 Volt, 60 Cycle house current.
3. Battery may be recharged on lawn mower or removed if more convenient.
4. Charger will not overcharge or damage battery if left on for an extended period.
5. **ALWAYS REMOVE THE CHARGER PLUG FROM THE BATTERY BEFORE REMOVING THE CHARGER FROM THE HOUSE CURRENT.**
6. **REMOVE IGNITION KEY AND KEEP IN A DIFFERENT LOCATION WHENEVER LAWN MOWER IS NOT IN USE TO PREVENT ACCIDENTAL STARTING.**

NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See adjustments.

RECOIL STARTER

1. Move throttle control lever to START position.
2. Crank engine. Pull recoil with a quick firm pull. Do not pull out so far that rope stops with a jerk as this will cause rope failure. Do not allow rope and handle to snap back into place.
3. After two or three full firm pulls on recoil (or as soon as engine fires), move speed control to run position.
4. Operate a new engine at intermediate speeds and light load for the first few hours as you would a new automotive engine.
5. To stop engine, move speed control lever to STOP position.
6. If carburetor needs adjustment to start or for operation, see "Carburetor Readjustment" section.

ELECTRIC START

1. Move throttle control to START position.
2. Insert the key and turn clockwise until the engine starts.
3. To start the engine manually, remove the plastic cap from the flywheel, wrap a short piece of rope around the starter pulley, set the throttle control in the START position and pull the rope to start.
4. Operate a new engine at intermediate speeds and light load for the first few hours as you would a new automotive engine.
5. To stop engine, move speed control lever to STOP position.
6. If carburetor needs readjustment to start or for operation, see "Carburetor Readjustment" section.

NOTE: A brief break-in period is essential to insure maximum engine life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. This is necessary on the initial run only. It is also recommended that the oil be changed after five (5) hours of operation. This allows for the removal of impurities which may have accumulated during the break-in period. Subsequent oil changes should be made as stated in the engine manual. Always check oil before using your mower. Be sure crankcase is full.

ADJUSTMENTS

CAUTION

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

CUTTING HEIGHT

This mower can be adjusted for seven cutting heights. To change the height, move the height adjustment lever away from the engine and forward to lower the cutting height and move to rear to raise the cutting height. The one lever adjusts all four wheels at the same time.

BELT

The belt requires no adjustment. The idler maintains the proper tension on the belt at all times.

THROTTLE

If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
2. Move throttle control lever on handle to "FAST" position.
3. Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.

USING YOUR ROTARY MOWER

For the best results do not cut wet grass because it tends to stick to the underside of the mower, thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

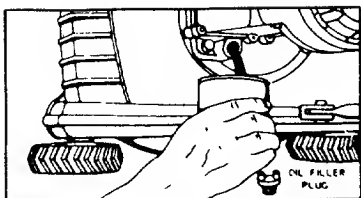
The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

LUBRICATION

IMPORTANT: Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

Engine — Follow engine manual for lubrication instructions.



NOTE: FILL AND DRAIN OIL FROM OIL FILL PLUG

Always disconnect spark plug cable during repairs, refueling or changing oil. Engine oil may be drained through oil filler opening by tilting the mower on its side. Change oil after first 5 hours of operation while engine is warm. Thereafter, change oil every 25 hours of operation while engine is warm.

Chain — Lubricate periodically with light engine oil (SAE No. 10 or 20).

Controls — Lubricate periodically the control assemblies and conduit and wire with light engine oil for ease of operation.

Wheels — Lubricate periodically bearings on front wheels with light engine oil. Rear drive wheels are equipped with sintered bearings. Lubricate at least once a season with light oil.

Protective Shield — The pivot points on the protective shield should be lubricated periodically with light oil to prevent any rust or binding.

Chute Deflector — The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

MAINTENANCE

CUTTING BLADE

The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lock washer holding blade and blade adapter to engine crankshaft.
2. Remove blade and blade adapter from engine crankshaft.
3. Remove two bolts, lock washers and nuts holding blade to blade adapter (if necessary).

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

NOTE

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

Deck — The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

CAUTION: Do not direct the stream of water at a hot engine as damage to the engine may result.

Belt Removal (Refer to drawing on page 10).

1. Be sure spark plug wire is removed from spark plug.
2. Remove the belt guard (Ref. No. 65) by removing the two screws on the belt guard.
3. Move the height adjustment lever (Ref. No. 27) to the high position.
4. Place a piece of plastic film under gas cap and tighten it. The plastic prevents gasoline from draining from the air vent in the cap.
5. Place the handle of mower on a table or bench so that the underside of deck is showing.
6. Remove cutting blade (Ref. No. 38) by removing blade bolt (Ref. No. 40).
7. Remove deck (Ref. No. 37) by removing four bolts (Ref. No. 43). **NOTE:** If you have a grass catcher adapter plate on your unit remove only one bolt, one towards the front wheels.
8. Remove master link (Ref. No. 81) and chain (Ref. No. 80).
9. Remove rear wheel hub cap (Ref. No. 55) from right hand rear wheel only.
10. Remove cotter pin (Ref. No. 31), ratchet (Ref. No. 56) and right hand rear wheel (Ref. No. 3).
11. Remove spring (Ref. No. 49) from cam assembly (Ref. No. 59).
12. Remove shoulder bolt (Ref. No. 18) from rear axle assembly (Ref. No. 4) on the right hand side only.
13. Remove cotter pin (Ref. No. 31) from shaft assembly (Ref. No. 5).
14. Pull idler assembly (Ref. No. 58) towards you and pull belt (Ref. No. 64) over idler.
15. Slide shaft assembly (Ref. No. 5) to the left.
16. Pull belt down past PTO pulley (Ref. No. 32) and over end of rear axle assembly (Ref. No. 4).
17. To replace with new belt, reverse the above steps.

Storage — The following steps should be taken to prepare the mower for storage.

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Store mower in dry, clean area.

NOTE

The manufacturer DOES NOT recommend the use of any accessory on this Rotary Mower other than those manufactured by MTD Products Inc.

GRASS CATCHER Model No. 194-003A is available as optional equipment for the mowers shown in this manual.

WARNING:

1. The mower should not be operated without the entire grass catcher or chute deflector in place.
2. The mower should not be operated without the protective shield on the rear of the deck in place.

NOTE:

Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-119.

★ IMPORTANT

After striking a foreign object, stop the engine (motor), remove wire from spark plug. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

124-290A 124-295A

IF YOU WRITE TO US ABOUT THIS ARTICLE
OR IF YOU ORDER REPLACEMENT PARTS AL-
WAYS MENTION THIS MODEL & SERIAL NO
MODEL

